REMARKS/ARGUMENTS

Claims 32-37 are pending in this Application.

Claims 32-37 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yajima et al. (US 5,049,208). Claims 32-37 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 6,332,933) in view of Yajima et al. Applicants respectfully traverse the rejections of claims 32-37.

Claim 32 recites:

> "A rapidly solidified alloy having a composition represented by the general formula: $(Fe_{1-m}T_m)_{100-x-y-z-n}Q_xR_yTi_zM_n$, where T is at least one element selected from the group consisting of Co and Ni; Q is at least one element selected from the group consisting of B and C; R is a rare earth element; and M is at least one element selected from the group consisting of Al, Si, V, Cr, Mn, Ni, Cu, Zn, Ga, Zr, Nb, Mo, Hf, Ta, W, Pt, Pb, Au and Ag, the mole fractions x, y, z, m and n satisfying the inequalities of:
>
> 10 at% $<$ x $\leqq$ 20 at%;
>
> 6 at% $\leqq$ y $<$ 10 at%;
>
> **0.5 at% $\leqq$ z $\leqq$ 6 at%**;
>
> $0 \leqq m \leqq 0.5$; and
>
> 0 at% $\leqq$ n $\leqq$ 5 at%, respectively,
>
> wherein the alloy has a thickness of between about 50 μm and about 200 μm, and
>
> wherein in the alloy, a crystal structure is located on each of two surfaces thereof that cross a thickness direction approximately at right angles." (emphasis added)

Applicants' claims 36 and 37 recite features which are similar to features recited in Applicants' claim 32, including the above emphasized features.

Applicants agree with the Examiner's statement in the paragraph bridging pages 6 and 7 of the outstanding Office Action that Applicants' claimed invention can be made by either a melt spinning process or a strip casting process.

Assuming *arguendo* that the Examiner has established a *prima facie* case of obviousness, Applicants respectfully submit that their claimed rapidly solidified alloy achieves unexpected results compared to the alloys of Yajima et al. and Ma et al.

Unexpected results can be established by showing that Applicants' claimed invention achieves substantially improved results and by stating that the substantially improved results of Applicants' claimed invention were unexpected. In re Soni, 54 F.3d 746 (CAFC 1995) and MPEP § 2144.08.

As explained in paragraph [0096] of the originally filed Specification, the results achieved by Applicants' claimed invention were unexpected. Furthermore, Applicants have provided herewith a Declaration under 37 CFR § 1.132 to further illustrate and establish the unexpected results of Applicants' claimed invention.

With respect to showing substantially improved results, the Examiner is referred to the table in Exhibit A attached to the Declaration under 37 CFR § 1.132. The combined magnetic properties of B_r, H_{cJ}, and $(BH)_{max}$ of each of the Examples 2, 4, 8-13, and 21-26 are substantially improved compared to the respective combined magnetic properties of B_r, H_{cJ}, and $(BH)_{max}$ of each of the Comparative Examples 1-10 in the Table of Exhibit A. For example, Example 13 and Comparative Example 6 differ in composition only by the addition of 3.0 at% of Ti to Example 13, and the magnetic properties of B_r, H_{cJ}, and $(BH)_{max}$ of Example 13 are substantially improved compared to the magnetic properties of B_r, H_{cJ}, and $(BH)_{max}$ of Comparative Example 6. Each of the other Examples 2, 4, 8-12, and 21-26 and Comparative Examples 1-5 and 7-10 establish substantially improved results in a similar manner. That is, Applicants have established that the addition of Ti in the amount of 0.5 - 6.0 at% as recited in Applicants' claims 32, 36, and 37 achieves unexpected results.

With respect to the statement of unexpected results, the Examiner is referred to paragraph [0096] of the originally filed Specification and to the statement regarding the same contained in the attached Declaration under 37 CFR § 1.132.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections of claims 32, 36, and 37 under 35 U.S.C. 103(a) as being unpatentable over Yajima et al. and under 35 U.S.C. 103(a) as being unpatentable over Ma et al. in view of Yajima et al.

Accordingly, Applicants respectfully submit that Yajima et al. and Ma et al., applied alone or in combination, fail to teach or suggest the unique combination and arrangement of elements recited in claims 32, 36, and 37 of the present application. Claims 33-35 depend upon claim 32 and are therefore allowable for at least the reasons that claim 32 is allowable.

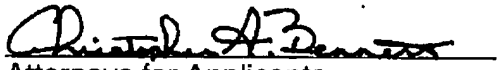
In view of the foregoing remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

To the extent necessary, Applicants petition the Commissioner for a ONE-month extension of time, extending to March 20, 2004, the period for response to the Office Action dated November 20, 2003.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

Date: March 22, 2004



Attorneys for Applicants

Joseph R. Keating
Registration No. 37,368

Christopher A. Bennett
Registration No. 46,710

KEATING & BENNETT LLP
10400 Eaton Place, Suite 312
Fairfax, VA 22030
Telephone: (703) 385-5200
Facsimile: (703) 385-5080